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## Essentials of Programming Languages

<http://proglang.informatik.uni-freiburg.de/teaching/konzepte/2015/>

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### Exercise Sheet 8

#### 8.1 Records

Add records to your language.

$$e ::= \dots \mid (x_1 : e_1, \dots, x_n : e_n) \mid e.x \mid e.x := e$$

Expression  $(x_1 : e_1, \dots, x_n : e_n)$  creates a record value which contains references to values  $v_i$ . The evaluation order should be from left to right. For  $e.x$  the subexpression  $e$  is evaluated to a value. If it is a record,  $e.x$  returns the value of the field  $x$  in the record. Similarly,  $e.x := e$  assigns a new value to the record field  $x$  in the record represented by the first subexpression.

#### Submission

**Deadline** The submission deadline is **26.06.2015, 12:00 (noon)**. Late submissions will not be accepted. Submit your solution to the subversion repository.

**Submission** Your solution will consist of one *folder* (**exercise8**) for each exercise sheet. Submit one *pdf* file (**<name>\_exercise8\_<nr>.pdf**) and one *rkt* file (**<name>\_exercise8\_<nr>.rkt**) per exercise.

Your solution may be either in German or in English. Clear and understandable style is required. You are strongly encouraged to test your solution. Your code must compile without errors (which did not necessarily mean that everything has to work). Provide your source code with comments to understand the intention.